
Genesee/Shiawassee Michigan Works! Occupational Employment and Wage Estimates

Selected Occupations for the Manufacturing Sector

Report for Genesee/Shiawassee Michigan Works!

April 2013



Provided by

**Workforce Development Agency, State of Michigan
Manufacturing Cluster**



Occupational Employment and Wage Estimates

The table on the following pages presents employment and wage estimates for selected occupations typically found in manufacturing establishments in the greater Flint area. It serves as a guide on market earnings in the local area for manufacturing companies. Geographic coverage includes the counties of Genesee and Shiawassee. The data are current as of January 2013.

Since the data come from a survey encompassing all industries in the economy, some of the occupations covered here may be found in non-manufacturing firms. In addition, not all of the occupations included in the survey are presented in this bulletin: data for hundreds more exist. Only wage and salary workers are covered by the survey (the self-employed are excluded).

Recent Trends in Wages

According to the U.S. Bureau of Labor Statistics, wage costs for manufacturing workers nationally increased 1.9 percent for the 12-month period ending December 2012, essentially unchanged from the December 2011 increase of 1.8 percent. This was little different from the trends for the private sector overall – 1.7 percent for December 2012 and 1.6 percent for December 2011. For more information search on “employment cost index news release text.”

The following “key” describes the information appearing in the statistical tables presented later in this bulletin –

SOC Code Number	Occupation Title	Employment (1)	Wage Estimates		
			10 th Percentile Earnings	Median Earnings	90 th Percentile Earnings
The Standard Occupational Classification (SOC) code number helps you locate a specific job description – see end of report.	The associated title for the Standard Occupational Classification (SOC) code appearing in the left column.	An estimate of the number of people employed in the occupation as of January 2013.	Wages typically paid to entry workers and those in small companies.	Average wages paid to workers in the occupation in your region.	Wages typically paid to experienced workers and to workers in large companies.

Additional Notes

It's important to remember that wages for a specific occupation can vary based on experience, the education and skills of individual workers, and a host of other factors. The lower end of the wage scale is typically a proxy for starting wages and wages at smaller companies; earnings at the upper end represent experienced workers at larger companies.

See "Occupational Employment and Wages for Selected Entry-Level Job Categories" later in this bulletin for earnings of other entry-level workers. Job descriptions are not provided for these occupations.

SOC Code Number	Occupation Title	Employment (1)	Wage Estimates		
			10 th Percentile Earnings	Median Earnings	90 th Percentile Earnings
	All Occupations/Jobs	205,892	11.71	16.67	25.07
17-2071	Electrical Engineers	54	25.40	35.35	46.95
17-2072	Electronics Engineers, Except Computer	47	24.58	33.81	45.31
17-2081	Environmental Engineers	26	28.44	39.62	56.56
17-2141	Mechanical Engineers	221	22.49	32.52	47.84
17-3013	Mechanical Drafters	74	12.50	17.72	24.37
17-3023	Electrical and Electronic Engineering Technicians	123	17.01	24.99	33.67
17-3025	Environmental Engineering Technicians	10	15.29	21.74	30.66
17-3027	Mechanical Engineering Technicians	27	15.69	22.57	30.32
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	26	14.80	26.76	37.96
49-9071	Maintenance and Repair Workers, General	1,322	8.77	13.56	23.88
49-9043	Maintenance Workers, Machinery	36	12.30	20.14	31.24
49-9098	Helpers--Installation, Maintenance, and Repair Workers	130	7.84	9.31	20.88
51-1011	First-Line Supervisors/Managers of Production and Operating Workers	585	16.08	32.27	45.44
51-2022	Electrical and Electronic Equipment Assemblers	53	10.85	15.79	21.88
51-2023	Electromechanical Equipment Assemblers	18	14.87	19.21	23.74
51-2031	Engine and Other Machine Assemblers	21	21.44	22.31	23.23
51-2041	Structural Metal Fabricators and Fitters	77	11.20	16.38	21.04
51-2092	Team Assemblers	1,217	10.72	21.02	31.27
51-4011	Computer-Controlled Machine Tool Operators, Metal	127	10.04	12.93	21.88

			Wage Estimates		
SOC Code Number	Occupation Title	Employment (1)	10 th Percentile Earnings	Median Earnings	90 th Percentile Earnings
	and Plastic				
51-4012	Numerical Tool and Process Control Programmers	30	10.97	15.47	22.23
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	103	8.57	11.06	15.10
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	144	8.54	11.80	16.34
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	14	10.74	12.19	13.54
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	76	10.43	16.14	21.44
51-4034	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	42	8.36	11.77	17.66
51-4035	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	35	8.64	12.43	16.47
51-4041	Machinists	721	9.05	13.69	20.11
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	424	7.70	10.28	16.07
51-4111	Tool and Die Makers	463	28.57	31.81	35.13
51-4121	Welders, Cutters, Solderers, and Brazers	343	11.64	15.54	22.24
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	36	9.10	12.45	16.97
51-4194	Tool Grinders, Filers, and Sharpeners	<10	11.94	12.63	13.63
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	349	11.15	19.68	25.88
51-9111	Packaging and Filling Machine Operators and Tenders	207	7.48	9.14	14.69
51-9121	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	70	7.85	10.07	14.11
51-9198	Helpers--Production Workers	472	7.79	9.09	14.49
53-1021	First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	154	13.68	19.22	35.06
53-1031	First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	152	16.19	27.97	41.16

			Wage Estimates		
SOC Code Number	Occupation Title	Employment (1)	10 th Percentile Earnings	Median Earnings	90 th Percentile Earnings
53-3031	Driver/Sales Workers	451	8.14	10.73	17.90
53-3032	Truck Drivers, Heavy and Tractor-Trailer	2,543	10.60	16.69	24.35
53-3033	Truck Drivers, Light Or Delivery Services	1,203	8.39	12.22	29.16
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	2,035	8.65	11.89	17.66
53-7063	Machine Feeders and Offbearers	36	10.59	15.69	23.02
53-7064	Packers and Packagers, Hand	651	8.01	9.07	11.80

1) Estimates do not include self-employed workers.

To calculate annual wages multiply the hourly wage by a "year-round, full-time" hours figure of 2,080 hours.

Source: Economic Modeling Specialists Incorporated (EMSI), first quarter 2013 data.

Occupational Employment and Wages for Selected Entry-Level Job Categories

Data for the following occupations are provided as a benchmark of wages for workers seeking entry level work not requiring much skill development. This provides a guide for manufacturers as to what types of wages are offered to entry-level lower-skilled workers in the region. Many manufacturers should consider these wage scales relative to the wages they offer entry-level workers.

SOC Code Number	Occupation Title	Employment (1)	Wage Estimates		
			10 th Percentile Earnings	Median Earnings	90 th Percentile Earnings
33-9032	Security Guards	2,003	8.15	10.81	15.42
37-3011	Landscaping and Groundskeeping Workers	2,124	7.68	10.18	14.74
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	3,727	7.87	10.68	16.00
43-5071	Shipping, Receiving, and Traffic Clerks	752	10.47	16.08	18.90
47-2041	Carpet Installers	72	8.64	13.15	16.51
47-2061	Construction Laborers	1,248	9.21	13.21	18.43
47-5081	Helpers--Extraction Workers	19	15.24	17.54	20.44
53-3033	Light Truck or Delivery Services Drivers	1,203	8.39	12.22	29.16
53-6021	Parking Lot Attendants	58	7.51	8.23	11.04
53-7081	Refuse and Recyclable Material Collectors	250	8.23	14.86	20.91

1) Estimates do not include self-employed workers.

To calculate annual wages multiply the hourly wage by a "year-round, full-time" hours figure of 2,080 hours.

Source: Economic Modeling Specialists Incorporated (EMSI), first quarter 2013 data.

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Job Descriptions

Descriptions appear in the same order as the data in the tables on the previous pages.

17-2071 Electrical Engineers - Design, develop, test, or supervise the manufacturing and installation of electrical equipment, components, or systems for commercial, industrial, military, or scientific use. Exclude "Computer Hardware Engineers" (17-2061).

17-2072 Electronics Engineers, Except Computer - Research, design, develop, and test electronic components and systems for commercial, industrial, military, or scientific use utilizing knowledge of electronic theory and materials properties. Design electronic circuits and components for use in fields such as telecommunications, aerospace guidance and propulsion control, acoustics, or instruments and controls. Exclude "Computer Hardware Engineers" (17-2061).

17-2081 Environmental Engineers - Design, plan, or perform engineering duties in the prevention, control, and remediation of environmental health hazards utilizing various engineering disciplines. Work may include waste treatment, site remediation, or pollution control technology.

17-2141 Mechanical Engineers - Perform engineering duties in planning and designing tools, engines, machines, and other mechanically functioning equipment. Oversee installation, operation, maintenance, and repair of such equipment as centralized heat, gas, water, and steam systems.

17-3013 Mechanical Drafters - Prepare detailed working diagrams of machinery and mechanical devices, including dimensions, fastening methods, and other engineering information.

17-3023 Electrical and Electronic Engineering Technicians - Apply electrical and electronic theory and related knowledge, usually under the direction of engineering staff, to design, build, repair, calibrate, and modify electrical components, circuitry, controls, and machinery for subsequent evaluation and use by engineering staff in making engineering design decisions. Exclude "Broadcast Technicians" (27-4012).

17-3025 Environmental Engineering Technicians - Apply theory and principles of environmental engineering to modify, test, and operate equipment and devices used in the prevention, control, and remediation of environmental pollution, including waste treatment and site remediation. May assist in the development of environmental pollution remediation devices under direction of engineer.

17-3027 Mechanical Engineering Technicians - Apply theory and principles of mechanical engineering to modify, develop, and test machinery and equipment under direction of engineering staff or physical scientists.

49-2094 Electrical and Electronics Repairers, Commercial and Industrial Equipment - Repair, test, adjust, or install electronic equipment, such as industrial controls, transmitters, and antennas. Exclude "Avionics Technicians" (49-2091), "Electronic Equipment Installers and Repairers, Motor Vehicles" (49-2096), and "Electrical and Electronics Installers and Repairers, Transportation Equipment" (49-2093).

49-9042 Maintenance and Repair Workers, General - Perform work involving the skills of two or more maintenance or craft occupations to keep machines, mechanical equipment, or the structure of an establishment in repair. Duties may involve pipe fitting; boiler making; insulating; welding; machining; carpentry; repairing electrical or mechanical equipment; installing, aligning, and balancing new equipment; and repairing buildings, floors, or stairs. Exclude "Maintenance Workers, Machinery" (49-9043).

49-9043 Maintenance Workers, Machinery - Lubricate machinery, change parts, or perform other routine machinery maintenance. Exclude "Maintenance and Repair Workers, General" (49-9042).

49-9098 Helpers-Installation, Maintenance, and Repair Workers - Help installation, maintenance, and repair workers in maintenance, parts replacement, and repair of vehicles, industrial machinery, and electrical and electronic equipment. Perform duties, such as furnishing tools, materials, and supplies to other workers; cleaning work area, machines, and tools; and holding materials or tools for other workers.

51-1011 First-Line Supervisors/Managers of Production and Operating Workers - Supervise and coordinate the activities of production and operating workers, such as inspectors, precision workers, machine setters and operators, assemblers, fabricators, and plant and system operators. Exclude team or work leaders.

51-2022 Electrical and Electronic Equipment Assemblers - Assemble or modify electrical or electronic equipment, such as computers, test equipment telemetering systems, electric motors, and batteries.

51-2023 Electromechanical Equipment Assemblers - Assemble or modify electromechanical equipment or devices, such as servomechanisms, gyros, dynamometers, magnetic drums, tape drives, brakes, control linkage, actuators, and appliances.

51-2031 Engine and Other Machine Assemblers - Construct, assemble, or rebuild machines, such as engines, turbines, and similar equipment used in such industries as construction, extraction, textiles, and paper manufacturing.

51-2041 Structural Metal Fabricators and Fitters - Fabricate, lay out, position, align, and fit parts of structural metal products.

51-2092 Team Assemblers - Work as part of a team having responsibility for assembling an entire product or component of a product. Team assemblers can perform all tasks conducted by the team in the assembly process and rotate through all or most of them rather than being assigned to a specific task on a permanent basis. May participate in making management decisions affecting the work. Team leaders who work as part of the team should be included. Exclude assemblers (51-2011 through 51-2099) who continuously perform the same task.

51-4011 Computer-Controlled Machine Tool Operators, Metal and Plastic - Operate computer-controlled machines or robots to perform one or more machine functions on metal or plastic work pieces.

51-4012 Numerical Tool and Process Control Programmers - Develop programs to control machining or processing of parts by automatic machine tools, equipment, or systems.

51-4021 Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic - Set up, operate, or tend machines to extrude or draw thermoplastic or metal materials into tubes, rods, hoses, wire, bars, or structural shapes.

51-4031 Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic - Set up, operate, or tend machines to saw, cut, shear, slit, punch, crimp, notch, bend, or straighten metal or plastic material.

51-4032 Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic - Set up, operate, or tend drilling machines to drill, bore, ream, mill, or countersink metal or plastic work pieces.

51-4033 Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic - Set up, operate, or tend grinding and related tools that remove excess material or burrs from surfaces, sharpen edges or corners, or buff, hone, or polish metal or plastic work pieces.

51-4034 Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic - Set up, operate, or tend lathe and turning machines to turn, bore, thread, form, or face metal or plastic materials, such as wire, rod, or bar stock.

51-4035 Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic - Set up, operate, or tend milling or planing machines to mill, plane, shape, groove, or profile metal or plastic work pieces.

51-4041 Machinists - Set up and operate a variety of machine tools to produce precision parts and instruments. Include precision instrument makers who fabricate, modify, or repair mechanical instruments. May also fabricate and modify parts to make or repair machine tools or maintain industrial machines, applying knowledge of mechanics, shop mathematics, metal properties, layout, and machining procedures.

51-4072 Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic - Set up, operate, or tend metal or plastic molding, casting, or coremaking machines to mold or cast metal or thermoplastic parts or products.

51-4111 Tool and Die Makers - Analyze specifications, lay out metal stock, set up and operate machine tools, and fit and assemble parts to make and repair dies, cutting tools, jigs, fixtures, gauges, and machinists' hand tools.

51-4121 Welders, Cutters, Solderers, and Brazers - Use hand-welding, flame-cutting, hand soldering, or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products.

51-4122 Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders - Set up, operate, or tend welding, soldering, or brazing machines or robots that weld, braze, solder, or heat treat metal products, components, or assemblies. Include workers who operate laser cutters or laser-beam machines.

51-4194 Tool Grinders, Filers, and Sharpeners - Perform precision smoothing, sharpening, polishing, or grinding of metal objects.

51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers - Inspect, test, sort, sample, or weigh nonagricultural raw materials or processed, machined, fabricated, or assembled parts or products for defects, wear, and deviations from specifications. May use precision measuring instruments and complex test equipment.

51-9111 Packaging and Filling Machine Operators and Tenders - Operate or tend machines to prepare industrial or consumer products for storage or shipment. Include cannery workers who pack food products.

51-9121 Coating, Painting, and Spraying Machine Setters, Operators, and Tenders - Set up, operate, or tend machines to coat or paint any of a wide variety of products including food, glassware, cloth, ceramics, metal, plastic, paper, or wood, with lacquer, silver, copper, rubber, varnish, glaze, enamel, oil, or rust-proofing materials. Exclude "Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic" (51-4193) and "Painters, Transportation Equipment" (51-9122).

51-9198 Helpers--Production Workers - Help production workers by performing duties of lesser skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment. Exclude apprentice workers and report them with the appropriate production occupation (51-1011 through 51-9199).

53-1021 First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand - Supervise and coordinate the activities of helpers, laborers, or material movers.

53-1031 First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators - Directly supervise and coordinate activities of transportation and material-moving machine and vehicle operators and helpers.

53-3031 Driver/Sales Workers - Drive truck or other vehicle over established routes or within an established territory and sell goods, such as food products, including restaurant take-out items, or pick up and deliver items, such as laundry. May also take orders and collect payments. Include newspaper delivery drivers. Exclude "Truck Drivers, Light or Delivery Services" (53-3033) and "Coin, Vending, and Amusement Machine Servicers and Repairers" (49-9091).

53-3032 Truck Drivers, Heavy and Tractor-Trailer - Drive a tractor-trailer combination or a truck with a capacity of at least 26,000 GVW, to transport and deliver goods, livestock, or materials in liquid, loose, or packaged form. May be required to unload truck. May require use of automated routing equipment. Requires commercial drivers' license.

53-3033 Truck Drivers, Light Or Delivery Services - Drive a truck or van with a capacity of under 26,000 GVW, primarily to deliver or pick up merchandise or to deliver packages within a specified area. May require use of automatic routing or location software. May load and unload truck. Exclude "Couriers and Messengers" (43-5021).

53-7062 Laborers and Freight, Stock, and Material Movers, Hand - Manually move freight, stock, or other materials or perform other unskilled general labor. Include all unskilled manual laborers not elsewhere classified. Exclude "Material Moving Workers" (53-7011 through 53-7199) who use power equipment. Exclude "Construction Laborers" (47-2061) and "Construction Trades Helpers" (47-3011 through 47-3019).

53-7063 Machine Feeders and Offbearers - Feed materials into or remove materials from machines or equipment that is automatic or tended by other workers.

53-7064 Packers and Packagers, Hand - Pack or package by hand a wide variety of products and materials.